

Prof. Saqib Anwar (PhD)

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Profile

A distinguished Full Professor in Manufacturing Engineering at King Saud University, Riyadh, Dr. Saqib Anwar brings over 13 years of expertise in academia and research. He holds MSc and Ph.D. degrees in manufacturing engineering from the University of Nottingham, U.K., where he gained extensive research experience at the Rolls-Royce University Technology Centre (UTC) (2009-2013). He is recognized as an Excellent Researcher, with a Scopus h-index of 30 and over 2,930 citations across 140+ peer-reviewed publications. He is ranked among the Top 2% of the highly-cited scientists in the world in 2025. His core research interests encompass sustainable manufacturing, 3D Printing/additive manufacturing, nanocomposites, polymer composites, advanced manufacturing processes, finite element modeling, and materials characterization. His work directly contributes to sustainable and knowledge-based economic development. In addition to his research, Dr. Saqib is dedicated to developing and teaching courses in the field of manufacturing. He is also highly experienced in preparing program accreditation documents for ABET and NCAAA. He has a proven track record of securing competitive research grants, leading research groups, and mentoring future engineers.

Web of Science profile link: <https://www.webofscience.com/wos/author/record/J-8433-2019>

Scopus profile link: <https://www.scopus.com/authid/detail.uri?authorId=56394726100>

Google Scholar profile link: <https://scholar.google.com/citations?user=VYwSteYAAAAJ&hl=en>

ORCID profile link: <https://orcid.org/0000-0003-2657-163X>

ResearchGate profile link: <https://www.researchgate.net/profile/Saqib-Anwar>

Core competencies

- **Curriculum Development**

Highly experienced in curriculum development (syllabi, assignments, projects, exams) and improvement for undergraduate and postgraduate programs.

- **Teaching Proficiency**

Expert in teaching basic and advanced courses at undergraduate and postgraduate levels.

- **Accreditation and Audit Documentation**

Expert in preparing and reviewing ABET and NCAAA-related accreditation documents both at the course and program levels, such as course reports, course specifications, annual program reports, and self-study reports (SSR).

- **Grading and Evaluation**

Proficient in grading and evaluating students' assessments at undergraduate and postgraduate levels.

- **Securing Research Grants**

Very well adept in writing and securing competitive research grants, e.g., from the Ministry of Education, SASO, and RDIA.

- **Expert in Research Writing**

Highly proficient and experienced in writing and communicating research results.

- **Projects and Research Supervision**

Highly experienced in the supervision of undergraduate and postgraduate projects and research theses, from research proposals to publications to thesis submissions.

- **Learning Management Systems (Blackboard)**

Skilled and experienced in using Blackboard for managing courses.

Research Metrics & Highlights

- h-index (Scopus) 30
- Total Citations (Scopus) 2,930+
- Total publications (Scopus) 140+
- Research Grants Secured SAR 2.6 Million (approx.)
- Ph.D. Students Supervised 5
- MSc Students Supervised 5
- BSc capstone design projects supervised 15+

Awards and honors

- Listed among the **World's Top 2% Scientists** by Stanford University Sept 2025
- Excellent Researcher Award** from the College of Engineering, King Saud University, for outstanding research performance. Apr 2019
- Certificate of Outstanding Contribution in Reviewing** from the International Journal of Machine Tools and Manufacture. Nov 2018
- Certificate of Appreciation for Distinguished Efforts in acquiring ABET accreditation** for the BSc program at the Industrial Engineering Department, College of Engineering, King Saud University. Nov 2015
- Distinction in MSc** from The University of Nottingham, UK. Nov 2009
- The Gold Medal** from the University of Engineering and Technology, Lahore, Pakistan, for the best overall performance in the Bachelor's. Dec 2010

Education

- Ph.D, Manufacturing Engineering** 2009 – 2013
The University of Nottingham, UK
Thesis title: Modelling of abrasive waterjet milled footprint
Supervisor: Prof. Dragos Axinte
- M.Sc., Manufacturing Engineering and Management** 2008 – 2009
The University of Nottingham, UK
Passed with distinction with an overall 72.3% percentage (2nd highest in the department)
- B.Sc., Industrial & Manufacturing Engineering** 2003 – 2007
(Gold medalist)
University of Engineering and Technology, Lahore, Pakistan

Teaching experience

- **Full Professor** (16th Oct 2023 – to date)
King Saud University, Riyadh, Saudi Arabia

Working as a Professor in the Industrial Engineering Department, College of Engineering.

Subjects taught and developed: Advanced Manufacturing Processes, Computer Integrated Manufacturing, Manufacturing Materials, Manufacturing Processes – I, Manufacturing Processes – II.

Supervisions: Supervising Ph.D. thesis, master's thesis, and BSc graduation projects.

Administration: Currently working as a coordinator for the manufacturing track for developing and reviewing documents related to manufacturing track courses for both undergraduate and postgraduate programs in the Industrial Engineering Department. Also, working as an active member of the undergraduate and postgraduate programs accreditation committees, contributing to the successful ABET accreditation of the Industrial Engineering Department undergraduate program, and preparing documents for the postgraduate programs accreditation. Additionally, I have been serving as a coordinator for the Labs and Purchasing committee, overseeing lab development and upgrades, since 2017.

➤ **Associate Professor** 2nd Sept 2019 – 15th Oct 2023)

King Saud University, Riyadh, Saudi Arabia

Worked as an Associate Professor in the Industrial Engineering Department, College of Engineering.

Subjects taught and developed: Manufacturing Materials, Manufacturing Processes – I, Manufacturing Processes – II, and CAD/CAM.

Supervisions: Supervised two Ph.D. theses, four master's theses, and ten BSc graduation projects.

Administration: Worked as the coordinator of the Lab and Purchasing Committee. Also worked as an active member of the BSc and Graduate programs accreditation committees, scientific committee, and statistics and information committee in the Industrial Engineering Department.

➤ **Assistant Professor** (1st Sept 2014 – 1st Sept 2019)

King Saud University, Riyadh, Saudi Arabia

Worked as an Assistant Professor in the Industrial Engineering Department, College of Engineering.

Subjects taught: Manufacturing processes – I, Manufacturing processes – II, CAD/CAM, Manufacturing Materials.

Supervisions: Supervised one Ph.D. project and several BSc graduation projects.

Administration: Worked as the coordinator of the lab and purchasing committee, and an active member of the ABET accreditation committee for the undergraduate program in the Industrial Engineering department.

➤ **Mentored BSc final year project** (2012 – 2013)

The University of Nottingham, UK

Mentored a BSc project with Prof. Dragos Axinte in the Mechanical, Materials, and Manufacturing Engineering department on the evaluation of cutting fluid for Rolls-Royce Plc.

➤ **Lab instructor** (2010 – 2012)

The University of Nottingham, UK

I worked as a Lab instructor for the Measurement and Control module in the Mechanical, Materials, and Manufacturing Engineering department during sessions 2010-2011 and 2011-2012. The main tasks were to **(i)** organize the lab manuals, **(ii)** conduct the lab with students, and **(iii)** grade and provide feedback on reports for students.

Research experience

- **Principal investigator** in a project funded by the Ongoing Research Funding program, King Saud University, Riyadh, Saudi Arabia, for establishing international research collaboration. (May 2025 – To present)
- **Principal investigator** in a project funded by the Ministry of Education to develop eco-friendly, recyclable carbon fiber-reinforced polymer composites for 3D printing applications. This project also led to the development of a 3D printing lab in the Industrial Engineering Department (June 2022 – March 2024)
- **Principal investigator** in a project funded by SASO, titled "Implementation of Minimum Quantity Lubrication (MQL) technique for machining operations in Saudi Arabia – a leap towards clean and sustainable manufacturing" (May 2023 – Dec 2023)
- **Principal investigator** in a project funded by the Researcher Supporting Project, King Saud University, Riyadh, Saudi Arabia, for establishing international research collaboration. (Jan 2023 – Dec 2024)
- **Principal investigator** in a research group grant titled "Advanced Machining and Manufacturing" from the Deanship of Scientific Research, King Saud University. (Sept 2017 – Jan 2021)
- **Co-investigator** in a Research, Development, and Innovation Authority (RDIA) funded project for developing an Industry 4.0 framework for the Saudi manufacturing industry. (Oct 2024 – To present)
- **Co-investigator** in a National Program for Science and Technology (NPST) funded project for investigating the dissimilar metals friction welding. (Sept 2019 – Aug 2022)
- **Supervising/Supervised five Ph.D. and five Master's theses** students on various advanced manufacturing-related topics (Sept 2018 – To date)
- Mentored two Ph.D. projects at The University of Nottingham, UK. (Aug 2013 – Oct 2013)

Samples of publications in various manufacturing fields in peer-reviewed journals

Complete list of publications can be seen at the following links

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=56394726100>

Google Scholar: <https://scholar.google.com/citations?user=VYwSteYAAAAJ&hl=en>

Web of Science: <https://www.webofscience.com/wos/author/record/J-8433-2019>

3D Printing / Additive Manufacturing

- AlFaify, Abdullah Yahia, Mustafa Saleh, **Saqib Anwar**, Abdulrahman M. Al-Ahmari, and Abd Elaty E. AbdElgawad. "Development of Graphene/Recycled Carbon Fiber-Reinforced PLA Composites for MEX Printing and Dry Machinability Analysis." *Polymers* 17, no. 17 (2025): 2372. <https://doi.org/10.3390/polym17172372>
- Ishfaq, Kashif, Muhammad Jawad, Muhammad Sana, Muhammad Arif Mahmood, **Saqib Anwar**, and Abdullah Yahia AlFaify. "Understanding the circular economy and mechanical performance of additively manufactured recycled PET for sustainable process optimization." *Rapid Prototyping Journal* (2025). <https://doi.org/10.1108/RPJ-06-2024-0265>
- Nasr, Mustafa M., and **Saqib Anwar**. "Developing an intelligent approach based on ANFIS and advanced NSGA-III for improving the turning performance of additively manufactured γ -TiAl alloy." *The International Journal of Advanced Manufacturing Technology* (2025): 1-26. <https://doi.org/10.1007/s00170-025-15366-5>

- Abdal-Hay, Abdalla, Necla Asli Kocak-Oztug, Faheem A. Sheikh, Pingping Han, **Saqib Anwar**, Benjamin PJ Fournier, and Sašo Ivanovski. "Fabrication of 3D bioactive melt electrowriting composite scaffold with high osteogenic potential." *Colloids and Surfaces B: Biointerfaces* 245 (2025): 114270. <https://doi.org/10.1016/j.colsurfb.2024.114270>
- Saleh, Mustafa, **Saqib Anwar**, Abdullah Yahia AlFaify, Abdulrahman M. Al-Ahmari, and Abd Elaty E. Abd Elgawad. 'Development of PLA/Recycled-Desized Carbon Fiber Composites for 3D Printing: Thermal, Mechanical, and Morphological Analyses'. *Journal of Materials Research and Technology* 29 (March 2024): 2768–80. <https://doi.org/10.1016/j.jmrt.2024.01.267>.
- Saleh, Mustafa, **Saqib Anwar**, Abdulrahman M. Al-Ahmari, and Abdullah Yahia AlFaify. 'Prediction of Mechanical Properties for Carbon Fiber/PLA Composite Lattice Structures Using Mathematical and ANFIS Models'. *Polymers* 15, no. 7 (March 2023): 1720. <https://doi.org/10.3390/polym15071720>.
- Saleh, Mustafa, **Saqib Anwar**, Abdulrahman M. Al-Ahmari, and Abdullah Alfaify. "Compression performance and failure analysis of 3D-printed carbon fiber/PLA composite TPMS lattice structures." *Polymers* 14, no. 21 (2022): 4595. <https://doi.org/10.3390/polym14214595>
- Dabwan, Abdulmajeed, **Saqib Anwar**, Ali M. Al-Samhan, Mustafa M. Nasr, and Abdullah AlFaify. "On the influence of heat treatment in suppressing the layer orientation effect in finishing of electron beam melted Ti6Al4V." *The International Journal of Advanced Manufacturing Technology* (2022): 1-14. <https://doi.org/10.1007/s00170-021-07995-3>
- **Anwar, Saqib**, Naveed Ahmed, Salman Pervaiz, Shafiq Ahmad, Ashfaq Mohammad, and Mustafa Saleh. 'On the Turning of Electron Beam Melted Gamma-TiAl with Coated and Uncoated Tools: A Machinability Analysis'. *Journal of Materials Processing Technology* 282 (August 2020): 116664. <https://doi.org/10.1016/j.jmatprotec.2020.116664>.
- **Anwar, Saqib**, Naveed Ahmed, Basem M. Abdo, Salman Pervaiz, M. A. K. Chowdhury, and Abdulrahman M. Alahmari. "Electron beam melting of gamma titanium aluminide and investigating the effect of EBM layer orientation on milling performance." *The International Journal of Advanced Manufacturing Technology* 96 (2018): 3093-3107. <https://doi.org/10.1007/s00170-018-1802-7>

Sustainable Manufacturing / Machining

- Sana, Muhammad, Kashif Ishfaq, Mudassar Rehman, **Saqib Anwar**, and Mudassar Rauf. "Investigation of the potential of nano-powder mixed surfactant based waste oil for reducing tool wear and dimensional errors in electro-erosion process." *Journal of Materials Research and Technology* (2025). <https://doi.org/10.1016/j.jmrt.2025.05.045>
- Ishfaq, Kashif, Muhammad Sana, Muhammad Umair Waseem, **Saqib Anwar**, and Abdul Wasy Zia. 'Circular Usage of Waste Cooking Oil towards Green Electrical Discharge Machining Process with Lower Carbon Emissions'. *The International Journal of Advanced Manufacturing Technology* 131, no. 9–10 (March 2024): 5133–53. <https://doi.org/10.1007/s00170-024-13322-3>.
- Farooq, Muhammad Umar, **Saqib Anwar**, Rizwan Ullah, and Rodolfo Haber Guerra. "Sustainable machining of additive manufactured SS-316L underpinning low carbon manufacturing goal." *Journal of materials research and technology* 24 (2023): 2299-2318. <https://doi.org/10.1016/j.jmrt.2023.03.122>
- **Anwar, Saqib**, Nauman Ahmad Khan, Sarmad Ali Khan, and Syed Farhan Raza. 'One-Step High-Speed Finish Drilling of Inconel 718 Superalloy via Novel Inserts'. *Processes* 11, no. 3 (March 2023): 752. <https://doi.org/10.3390/pr11030752>.
- Khan, Aqib Mashood, **Saqib Anwar**, Abdullah Alfaify, Muhammad Jamil, Shubham Sharma, Muhammad Umar Farooq, Waqas Khaliq, and Asif Iqbal. "Comparison of machinability and economic aspects in turning of Haynes-25 alloy under novel hybrid cryogenic-LN oils-on-water approach." *The International Journal of*

Advanced Manufacturing Technology 120, no. 1 (2022): 427-445. <https://doi.org/10.1007/s00170-022-08815-y>

- Abdullah, Fawaz M., Mustafa Saleh, Abdulrahman M. Al-Ahmari, and **Saqib Anwar**. "The impact of Industry 4.0 technologies on manufacturing strategies: proposition of technology-integrated selection." *Ieee Access* 10 (2022): 21574-21583. <https://doi.org/10.1109/ACCESS.2022.3151898>
- Ross, Nimel Sworna, Mozammel Mia, **Saqib Anwar**, Manimaran G, Mustafa Saleh, and Shafiq Ahmad. 'A Hybrid Approach of Cooling Lubrication for Sustainable and Optimized Machining of Ni-Based Industrial Alloy'. *Journal of Cleaner Production* 321 (October 2021): 128987. <https://doi.org/10.1016/j.jclepro.2021.128987>.
- Khan, Sarmad Ali, **Saqib Anwar**, Kashif Ishfaq, Muhammad Zubair Afzal, Shafiq Ahmad, and Mustafa Saleh. 'Wear Performance of Modified Inserts in Hard Turning of AISI D2 Steel: A Concept of One-Step Sustainable Machining'. *Journal of Manufacturing Processes* 60 (December 2020): 457–69. <https://doi.org/10.1016/j.jmapro.2020.10.052>.
- Pervaiz, Salman, **Saqib Anwar**, Imran Qureshi, and Naveed Ahmed. 'Recent Advances in the Machining of Titanium Alloys Using Minimum Quantity Lubrication (MQL) Based Techniques'. *International Journal of Precision Engineering and Manufacturing-Green Technology* 6, no. 1 (January 2019): 133–45. <https://doi.org/10.1007/s40684-019-00033-4>.

Advanced Manufacturing Processes

- Afzal, Muhammad Zubair, Sarmad Ali Khan, Aqib Mashood Khan, Muhammad Qaiser Saleem, and **Saqib Anwar**. "Wear behavior of novel CVD-coated wiper inserts' with various chip-breakers and resulting surface integrity during dry drilling of Ti-6Al-4V." *Tribology International* 202 (2025): 110323. <https://doi.org/10.1016/j.triboint.2024.110323>
- Ishfaq, Kashif, Muhammad Asad Maqsood, Syed Farhan Raza, **Saqib Anwar**, and Muhammad Arif Mahmood. "Effect of Tool Material and Pin Configuration on Mechanical Properties of Magnesium ME20 Alloy Joint by Friction Stir Welding." *Journal of Materials Engineering and Performance* 33, no. 17 (2024): 8789-8803. <https://doi.org/10.1007/s11665-024-09395-6>
- Farooq, Muhammad Umar, and **Saqib Anwar**. "Investigations on the surface integrity of Ti6Al4V under modified dielectric (s)-based electric discharge machining using cryogenically treated electrodes." *Processes* 11, no. 3 (2023): 877. <https://doi.org/10.3390/pr11030877>
- **Anwar, Saqib**, Ateekh Ur Rehman, Yusuf Usmani, and Ali M. Al-Samhan. 'Influence of Post Weld Heat Treatment on the Grain Size, and Mechanical Properties of the Alloy-800H Rotary Friction Weld Joints'. *Materials* 14, no. 16 (August 2021): 4366. <https://doi.org/10.3390/ma14164366>.
- Badwelan, Ahmed, Ali M. Al-Samhan, **Saqib Anwar**, and Lotfi Hidri. 'Novel Technique for Enhancing the Strength of Friction Stir Spot Welds through Dynamic Welding Parameters'. *Metals* 11, no. 2 (February 2021): 280. <https://doi.org/10.3390/met11020280>.
- Saleh, Mustafa, **Saqib Anwar**, Abdualziz El-Tamimi, Muneer Khan Mohammed, and Shafiq Ahmad. 'Milling Microchannels in Monel 400 Alloy by Wire EDM: An Experimental Analysis'. *Micromachines* 11, no. 5 (April 2020): 469. <https://doi.org/10.3390/mi11050469>.
- Abdo, Basem M. A., **Saqib Anwar**, and Abdualziz El-Tamimi. 'Machinability Study of BioloX Forte Ceramic by Milling Microchannels Using Rotary Ultrasonic Machining'. *Journal of Manufacturing Processes* 43 (July 2019): 175–91. <https://doi.org/10.1016/j.jmapro.2019.05.031>.
- Abdo, Basem MA, Naveed Ahmed, Abdulaziz M. El-Tamimi, **Saqib Anwar**, Hisham Alkhalefah, and Emad Abouel Nasr. "Laser beam machining of zirconia ceramic: An investigation of micro-machining geometry and

surface roughness." *Journal of Mechanical Science and Technology* 33 (2019): 1817-1831. <https://doi.org/10.1007/s12206-019-0334-x>

- **Anwar, Saqib**, Mustafa M. Nasr, Abdulrahman Al-Ahmari, Mohammed Alkahtani, Basem Abdo, Abdulaziz El-Tamimi, and Saied Darwish. 'Rotary Ultrasonic Drilling of Ti6Al4V: Effects of Machining Parameters and Tool Diameter'. *Advances in Mechanical Engineering* 10, no. 1 (January 2018): 168781401775078. <https://doi.org/10.1177/1687814017750784>.
- Axinte, D. A., B. Karpuschewski, M. C. Kong, A. T. Beaucamp, **Saqib Anwar**, D. Miller, and M. Petzel. "High Energy Fluid Jet Machining (HEFJet-Mach): From scientific and technological advances to niche industrial applications." *CIRP Annals* 63, no. 2 (2014): 751-771. <https://doi.org/10.1016/j.cirp.2014.05.001>
- Kong, Cong, **Saqib Anwar**, John Billingham, and Dragos Axinte. "Mathematical modelling of abrasive waterjet footprints for arbitrarily moving jets: part I—single straight paths." *International Journal of Machine Tools and Manufacture* 53, no. 1 (2012): 58-68. <https://doi.org/10.1016/j.ijmachtools.2011.09.010>

Nanocomposites / Nanomaterials / Advanced Materials

- Masud, Manzar, Aamir Mubashar, Salman Sagheer Warsi, Volkan Esat, and **Saqib Anwar**. "Optimizing bio-hybrid composites for impact resistance using machine learning." *Journal of the Brazilian Society of Mechanical Sciences and Engineering* 47, no. 5 (2025): 217. <https://doi.org/10.1007/s40430-025-05524-x>
- Nasr, Mustafa M., **Saqib Anwar**, Ali M. Al-Samhan, Khaled N. Alqahtani, Mohammed H. Alhaag, and Rayan Saleem M. Omar. "Sustainable high-speed milling enhancement of GnP-reinforced titanium nanocomposites under dry environment." *Journal of Manufacturing Processes* 124 (2024): 778-792. <https://doi.org/10.1016/j.jmapro.2024.06.035>
- Albani, Ragad, Syed Rashid Habib, Abdulaziz AlQahtani, Abdulaziz A. AlHelal, Mohammed Alrabiah, and **Saqib Anwar**. 'The Surface Roughness of Contemporary Indirect CAD/CAM Restorative Materials That Are Glazed and Chair-Side-Finished/Polished'. *Materials* 17, no. 5 (February 2024): 997. <https://doi.org/10.3390/ma17050997>.
- Alrabeah, Ghada, Faisal Binhassan, Sultan Al Khaldi, Ahmed Al Saleh, Khaled Al Habeeb, **Saqib Anwar**, and Syed Rashid Habib. 'Effect of Self-Adhesive Resin Cement Film Thickness on the Shear Bond Strength of Lithium Disilicate Ceramic–Cement–Tooth Triplex'. *Inorganics* 12, no. 1 (December 2023): 14. <https://doi.org/10.3390/inorganics12010014>.
- Nasr, Mustafa M., **Saqib Anwar**, Ali M. Al-Samhan, Khaled N. Alqahtani, Abdulmajeed Dabwan, and Mohammed H. Alhaag. 'Sustainable Microfabrication Enhancement of Graphene Nanoplatelet-Reinforced Biomedical Alumina Ceramic Matrix Nanocomposites'. *Nanomaterials* 13, no. 6 (March 2023): 1032. <https://doi.org/10.3390/nano13061032>.
- Nasr, Mustafa M., **Saqib Anwar**, Ali M. Al-Samhan, Hany S. Abdo, and Abdulmajeed Dabwan. 'On the Machining Analysis of Graphene Nanoplatelets Reinforced Ti6Al4V Matrix Nanocomposites'. *Journal of Manufacturing Processes* 61 (January 2021): 574–89. <https://doi.org/10.1016/j.jmapro.2020.10.060>.

Artificial Intelligence (AI) & Optimization in Manufacturing

- Hassan, Sana, Muhammad Asad, Muhammad Sana, Muhammad Umar Farooq, and **Saqib Anwar**. "Parametric analysis and multi-objective optimization for machining complex features on D2 and DC53 steels for tooling applications." *Journal of Materials Engineering and Performance* (2024): 1-15. <https://doi.org/10.1007/s11665-024-09828-2>
- Ishfaq, Kashif, Muhammad Asad, Waqar Muhammad Ashraf, Muhammad Sana, **Saqib Anwar**, Wei Zhang, and Vivek Dua. "Towards artificial intelligence empowered performance enhancement of EDM process using

nano-graphene mixed bio-dielectric supporting the carbon neutrality and sustainable development." *Journal of Cleaner Production* 457 (2024): 142482. <https://doi.org/10.1016/j.jclepro.2024.142482>

- Sana, Muhammad, Muhammad Asad, Muhammad Umar Farooq, **Saqib Anwar**, and Muhammad Talha. "Sustainable electric discharge machining using alumina-mixed deionized water as dielectric: process modelling by artificial neural networks underpinning net-zero from industry." *Journal of Cleaner Production* 441 (2024): 140926. <https://doi.org/10.1016/j.jclepro.2024.140926>
- Ishfaq, Kashif, Muhammad Sana, Muhammad Umair Waseem, Muhammad Arif Mahmood, and **Saqib Anwar**. "Mathematical modeling and experimental evaluation of superalloy EDM using cryogenically treated electrodes and transformer oil-based dielectrics: a correlation study." *The International Journal of Advanced Manufacturing Technology* 129, no. 3 (2023): 1649-1663. <https://doi.org/10.1007/s00170-023-12398-7>
- Abbas, Adel T., Neeraj Sharma, **Saqib Anwar**, Faraz H. Hashmi, Muhammad Jamil, and Hussien Hegab. 'Towards Optimization of Surface Roughness and Productivity Aspects during High-Speed Machining of Ti6Al4V'. *Materials* 12, no. 22 (November 2019): 3749. <https://doi.org/10.3390/ma12223749>.
- Abdo, Basem, Abdulaziz M. El-Tamimi, **Saqib Anwar**, Usama Umer, Abdulrahman M. Alahmari, and Mageed Ghaleb. 'Experimental Investigation and Multi-Objective Optimization of Nd:YAG Laser Micro-Channeling Process of Zirconia Dental Ceramic'. *The International Journal of Advanced Manufacturing Technology* 98, no. 5–8 (July 2018): 2213–30. <https://doi.org/10.1007/s00170-018-2374-2>.

Finite Element Modeling (FEM) / Simulation

- Mia, Mozammel, **Saqib Anwar**, and Xiao Yang. "Finite element modeling of machining with interactive friction model based evolutionary friction." *Journal of Manufacturing Processes* 148 (2025): 61-74. <https://doi.org/10.1016/j.jmapro.2025.04.073>
- Dogar, Muhammad Mughees Abbas, Aamir Mubashar, Manzar Masud, Usman Ayub, **Saqib Anwar**, and Xianwei Wang. "Influence of Fibre Stacking Sequence on Impact Resistance and Residual Strength in Flax/Basalt Hybrid Laminates." *Applied Composite Materials* 32, no. 2 (2025): 681-702. <https://doi.org/10.1007/s10443-024-10294-1>
- Mia, Mozammel, Lemeng Zhang, **Saqib Anwar**, and Heli Liu. "Development of digital characteristics of machining based on physics-guided data." *Journal of Manufacturing Systems* 71 (2023): 438-450. <https://doi.org/10.1016/j.jmsy.2023.09.014>
- Pervaiz, Salman, Sathish Kannan, **Saqib Anwar**, and Dehong Huo. "Machinability analysis of dry and liquid nitrogen-based cryogenic cutting of Inconel 718: experimental and FE analysis." *The International Journal of Advanced Manufacturing Technology* (2022): 1-18. <https://doi.org/10.1007/s00170-021-08173-1>
- Abdullah, Fawaz M., **Saqib Anwar**, and Abdulrahman Al-Ahmari. 'Thermomechanical Simulations of Residual Stresses and Distortion in Electron Beam Melting with Experimental Validation for Ti-6Al-4V'. *Metals* 10, no. 9 (August 2020): 1151. <https://doi.org/10.3390/met10091151>.
- Al-Ahmari, Abdulrahman, Emad Abouel Nasr, Khaja Moiduddin, **Saqib Anwar**, Mohammed Al Kindi, and Ali Kamrani. 'A Comparative Study on the Customized Design of Mandibular Reconstruction Plates Using Finite Element Method'. *Advances in Mechanical Engineering* 7, no. 7 (July 2015): 168781401559389. <https://doi.org/10.1177/1687814015593890>.
- **Anwar, Saqib.**, D. A. Axinte, and A. A. Becker. "Finite element modelling of overlapping abrasive waterjet milled footprints." *Wear* 303, no. 1-2 (2013): 426-436. <https://doi.org/10.1016/j.wear.2013.03.018>
- **Anwar, Saqib.**, D. A. Axinte, and A. A. Becker. "Finite element modelling of abrasive waterjet milled footprints." *Journal of Materials Processing Technology* 213, no. 2 (2013): 180-193. <https://doi.org/10.1016/j.jmatprotec.2012.09.006>

- **Anwar, Saqib**, DA A. Axinte, and A. A. Becker. "Finite element modelling of a single-particle impact during abrasive waterjet milling." *Proceedings of the Institution of Mechanical Engineers, Part J: Journal of Engineering Tribology* 225, no. 8 (2011): 821-832. <https://doi.org/10.1177/1350650111411252>

Materials Characterization

- Farooq, Muhammad Umar, **Saqib Anwar**, Haider Ali Bhatti, M. Saravana Kumar, Muhammad Asad Ali, and Muhammad Imam Ammarullah. "Electric discharge machining of Ti6Al4V ELI in biomedical industry: parametric analysis of surface functionalization and tribological characterization." *Materials* 16, no. 12 (2023): 4458. <https://doi.org/10.3390/ma16124458>
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